



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,553	08/21/2006	Stefan Frits Brouwer	65529-003	1858
26127 7590 09/25/2009 DYKEMA GOSSETT PLLC 39577 WOODWARD AVENUE SUITE 300 BLOOMFIELD HILLS, MI 48304-5086				
EXAMINER DOAK, JENNIFER L				
ART UNIT		PAPER NUMBER		
2872				
MAIL DATE		DELIVERY MODE		
09/25/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* STEFAN FRITS BROUWER, ARJEN VAN GELDEREN,  
and PAULUS GERADUS VAN STIPHOUT

---

Appeal 2009-006169  
Application 10/553,553  
Technology Center 2800

---

Decided: September 24, 2009

---

Before CHARLES F. WARREN, TERRY J. OWENS, and  
MARK NAGUMO, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

DECISION ON APPEAL

Applicants appeal to the Board from the decision of the Primary Examiner finally rejecting claims 11 through 23 and 25 through 33 in the Office Action mailed February 20, 2008. 35 U.S.C. §§ 6 and 134(a) (2002); 37 C.F.R. § 41.31(a) (2008).

We reverse the decision of the Primary Examiner.

Claim 11 illustrates Appellants' invention of a wing mirror unit for a vehicle, and is representative of the claims on appeal:

11. A wing mirror unit for a vehicle, comprising:

a base plate;

a supporting frame pivotally connected to the base plate about a main pivot and an auxiliary pivot; and

an actuator including an engaging part connected to the supporting frame, the actuator being connected to the main pivot and configured to move the main pivot in a linear path further outwardly from said vehicle than the auxiliary pivot;

wherein the supporting frame is pivotal with respect to the base plate between a folded orientation, in which the supporting frame substantially abuts along a body of said vehicle, and an unfolded orientation, in which the supporting frame is substantially oriented transversely to the body of said vehicle; and

further wherein the engaging part is adjustable between a first orientation located near the body of said vehicle and a second orientation located farther outward with respect [sic] the body of said vehicle.

The Examiner relies upon the evidence in these references (Ans. 3):

McKee	4,609,265	Sep. 2, 1986
Crandall	5,940,230	Aug. 17, 1999

Appellants request review of the ground of rejection under 35 U.S.C. § 103(a) advanced on appeal by the Examiner (App. Br. 3): appealed claims 11 through 23 and 25 through 33 over Crandall in view of McKee. Ans. 4.

Appellants argue the claims as a group and further rely on the same arguments in arguing claims 17 and 18 as a group and claim 19 separately. App. Br. 4, 8, and 9. Thus, we decide this appeal based on claim 11. 37 C.F.R. § 41.37(c)(1)(vii) (2008).

#### Issue

The dispositive issue in this appeal is whether Appellants have shown

that the evidence in the combined teachings of Crandall and McKee does not support the Examiner's conclusion of prima facie obviousness with respect to the claimed winged mirror unit encompassed by claim 11 which specifies an "actuator being connected to the main pivot and configured to move the main pivot in a linear path further outwardly from said vehicle than the auxiliary pivot."

#### Claim Interpretation

The plain language of representative independent claim 11 encompasses in pertinent part, as illustrated by Specification Figures 1 (wing mirror folded) and 2 (wing mirror unfolded), wing mirror unit 1 comprising at least base plate 2; supporting frame 5 pivotally connected to base plate 2 about main pivot 4 and auxiliary pivot 8; actuator 6 including an engaging part connected to supporting frame 5 and connected to main pivot 4; wherein actuator 6 is configured to move main pivot 4 in a linear path further outwardly from said vehicle than auxiliary pivot 8. *See, e.g., In re ICON Health and Fitness, Inc.*, 496 F.3d 1374, 1378-79 (Fed. Cir. 2007); *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004), and cases cited therein; *In re Morris*, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997).

#### Findings of Fact

We find Crandall would have disclosed to one of ordinary skill in this art, as illustrated in Crandall Figures 3 (wing mirror unfolded) and 4 (wing mirror folded), wing mirror unit coupling mechanism 32 comprising at least applique or base plate 20, supporting frame 22 pivotally connected to base plate 20 about main pivot 16 and an auxiliary pivot formed by the pivotal connection of arc-shaped link 46 and housing arm 48; actuator motor 30,

output shaft 34, and pivot gear 44 which is attached to output shaft 34 by segment gear 52 and pivoting on pivot gear axis 50, is connected to supporting frame 22 through arc-shaped link 46 pivotally connected to pivot gear 44 and to housing arm 48. Crandall discloses the actuator components move pivot gear 44 to rotate about pivot gear axis 50, which moves arc-shaped link 46 to move housing arm 48 so that mirror housing 22 pivots about axis 16. Crandall col. 3, l. 18 to col. 4, l. 3.

We find McKee would have disclosed to one of ordinary skill in this art, as illustrated in McKee Figures 6 and 2, a rearview mirror actuating system embodiment wherein motor 58 has short motor shaft 190 pivotally connected to lever 34 which rotates therewith; lever 34 is pivotally connected to lever arm 120 which is pivotally connected eccentrically to cam member 122 that is rotatably mounted on housing plate 124 by central axis 126. McKee discloses cam 122 is pivotally connected to lever arm 128 which is secured to cable 130 that is secured to pivot bracket 30 of mirror 12. McKee col. 2, l. 66 to col. 3, l. 7, and col. 5, ll. 28-38.

### Opinion

We are of the opinion Appellants have shown that the evidence in the combined teachings of Crandall and McKee does not support the Examiner's conclusion of prima facie obviousness with respect to the claimed winged mirror unit encompassed by claim 11 which requires an "actuator being connected to the main pivot and configured to move the main pivot in a linear path further outwardly from said vehicle than the auxiliary pivot."

In comparing the claimed wing mirror with the prior art, the Examiner considers the pivotal connection between arc-shaped link 46 and housing

arm 48 to be the “main pivot” and the pivotal connection between pivot gear 44 and arc-shaped link 46 to be the “auxiliary pivot.” Ans. 4-5, citing Crandall Fig. 4. The Examiner argues the actuator is “configured to move the main pivot . . . in a path further outwardly from said vehicle than the auxiliary pivot.” Ans. 4. The Examiner acknowledges “Crandall does not teach that the main pivot moves in a linear path,” and argues “McKee teaches linear translation of a pivot join (Fig. 6).” Ans. 5.

Appellants submit the movement of Crandall’s arc-shaped link 46 and housing arm 48 cannot be linear, and contends that substantial modification would be required to provide the Examiner’s “main pivot” with the linear movement taught by McKee. App. Br. 6. Thus, Appellants contend there is no suggestion or motivation in the combined teachings of Crandall and McKee to modify Crandall’s wing mirror unit for linear movement as claimed. App. Br. 7.

We agree with Appellants. We determine one of ordinary skill in this art would have reasonably inferred from Crandall that the movement of the pivotal connection between arc-shaped link 46 and housing arm 48 translates an arc as recognized by the Examiner. However, the Examiner has adduced no scientific reasoning or evidence explaining the motivation to one of ordinary skill in this art to combine Crandall and McKee leading to modification of Crandall’s coupling mechanism 32 to accommodate linear movement of a “main pivot” relative to an “auxiliary pivot.” Indeed, the Examiner does not even propose how this person would modify Crandall’s coupling mechanism 32 based on the combined teachings of the references. Ans. 5 and 11-14. *See, e.g., KSR Int’l Co. v. Teleflex Inc.,*

550 U.S. 398, 418-19 (2007) (“[I]t can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.”); *In re Kahn*, 441 F.3d 977, 987-88 (Fed. Cir. 2006); *In re Rouffet*, 149 F.3d 1350, 1358 (Fed. Cir. 1998) (“hindsight” is inferred when the specific understanding or principal within the knowledge of one of ordinary skill in the art leading to the modification of the prior art in order to arrive at appellant’s claimed invention has not been explained); *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992) (“The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.”); *In re Warner*, 379 F.2d 1011, 1016 (CCPA 1967) (“[W]here the invention sought to be patented resides in a combination of old elements, the proper inquiry is whether bringing them together was obvious and not, whether one of ordinary skill, having the invention before him, would find it obvious through hindsight to construct the invention from elements of the prior art.”).

Accordingly, we reverse the ground of rejection advanced on appeal.

The Primary Examiner’s decision is reversed.

REVERSED

tc

DYKEMA GOSSETT PLLC  
39577 WOODWARD AVENUE  
SUITE 300

Appeal 2009-006169  
Application 10/553,553

BLOOMFIELD HILLS, MI 48304-5086